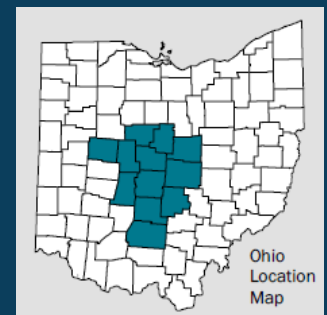
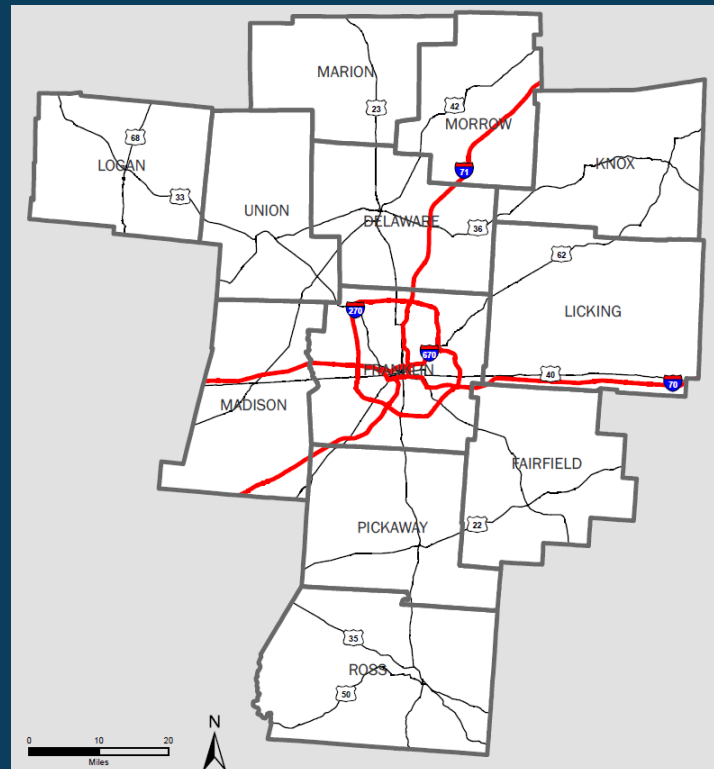


REGIONAL ENERGY ACTION PLAN for the Columbus Region



Mid-Ohio Regional
Planning Commission



- Regional assessment of the economic, social and policy realities related to energy use & development.
 - Set of recommendations to catalyze a more prosperous economy and enriched environment.
-

Prepared By:



Supported By:



Project Team:



1) Collect current information

- Identify actors and partners
- Quantify energy use
- Review current energy related policies
- Document current energy related activities

2) Evaluate the information

- Assets, opportunities, and weaknesses

3) Identify what to do to get stronger

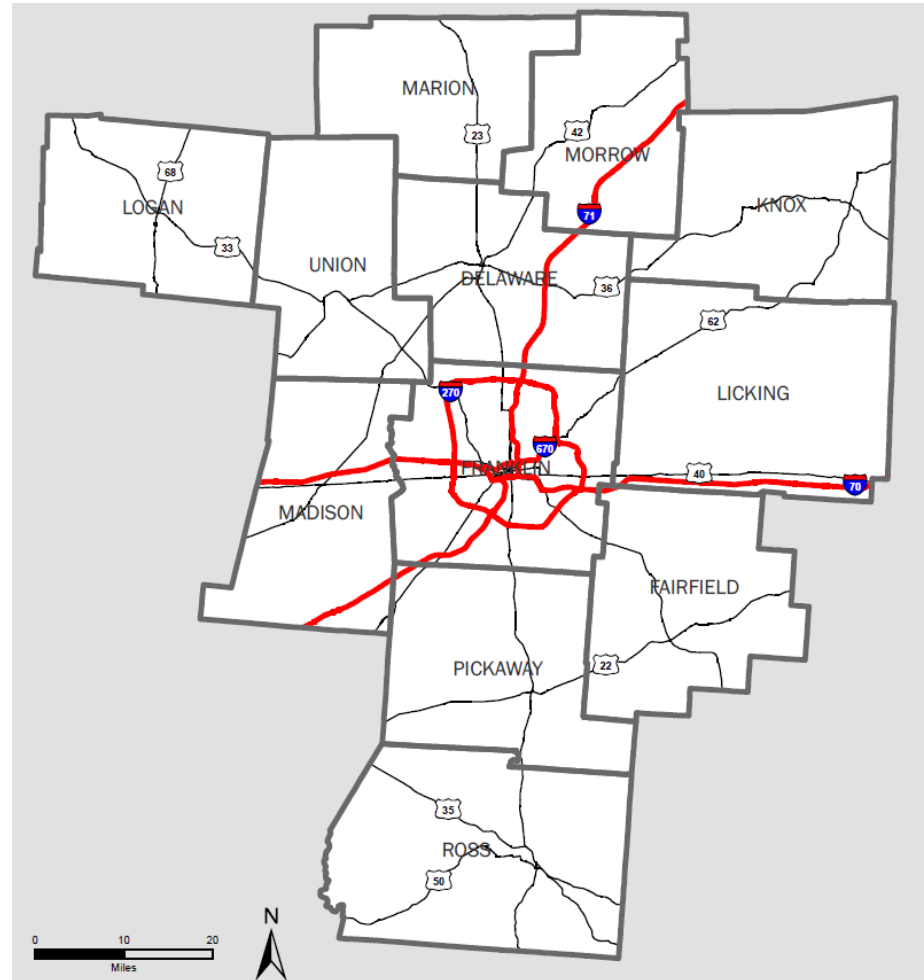
- Identify ways to use strengths to advance an energy economy and address weaknesses
- Through peer review and stakeholder engagement, gain consensus on recommendations and develop strategy

- The Region is growing with expected increased energy consumption.
- Region has higher per capita energy use than rest of Ohio & U.S.
- 86% of total energy generated is wasted – U.S. average.
- Translated locally, this magnitude of waste impacts the regional economy by costing \$1 - \$2 billion.
- Very little energy produced locally.
- Significant ARRA investments but need for long-term capital for energy projects.
- Federal and state policy and regulations will impact reliability, diversity of energy choices, and price of energy in the region.

Columbus Region Snapshot



- 2 million now, 2.5 million by 2035
- 54 colleges and universities
- 15 Fortune 1000 headquarters
- Diverse employment sectors



- 800,000 people
- 15th largest city
- Same square mileage as Chicago with 1/3 of the people
- Strong sustainability focus (Green Pact, GreenSpot, Green Team, etc)



COLUMBUS REGION RESIDENTS

Use **3%** more energy than the average Ohioan

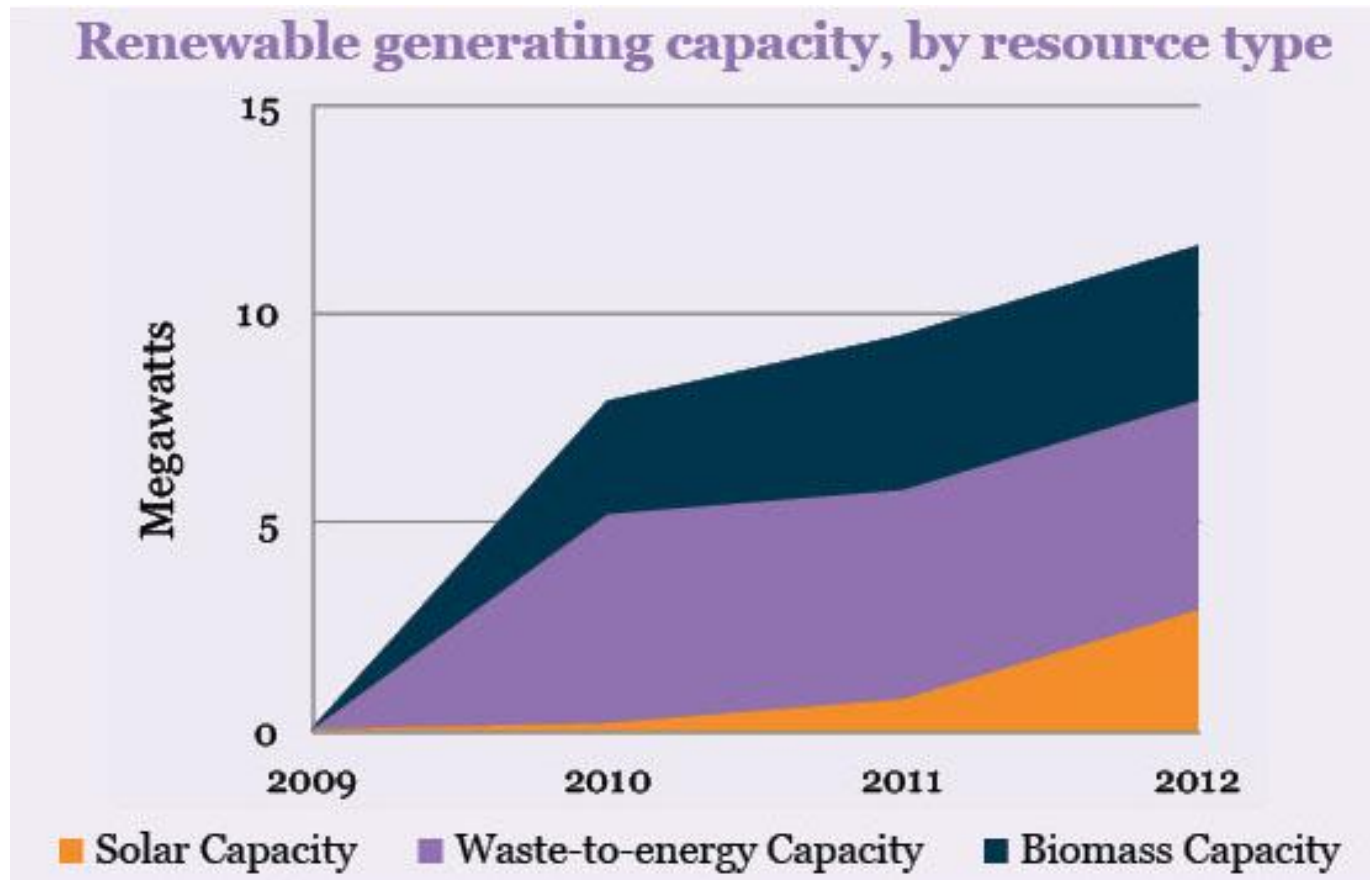
Use **8%** more than the average American

The Columbus Region uses electricity
4.5 times the rate at which it generates it

**= \$1-2 billion wasted and
missed opportunities in energy efficiency**







- OH national leader in wind-related supply chain, and estimated 3,800 jobs in the solar industry.
- Statewide potential to generate 9,800 MW, nearly 30% of electric generation from CHP.
- Region has innovative energy storage and smart grid projects. AEP demonstration project with battery back-up power for up to 300 homes in Gahanna.
- Region is home to premier energy focused research institutions (Battelle, OSU, EWI).
- Columbus ranked in the top 40 cities for LEED project activity.
- Big opportunities in efficiency, solar, waste to energy.

Renewable Generating Capacity

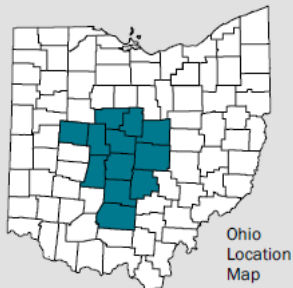


Regional Energy Action Plan Solar Installations

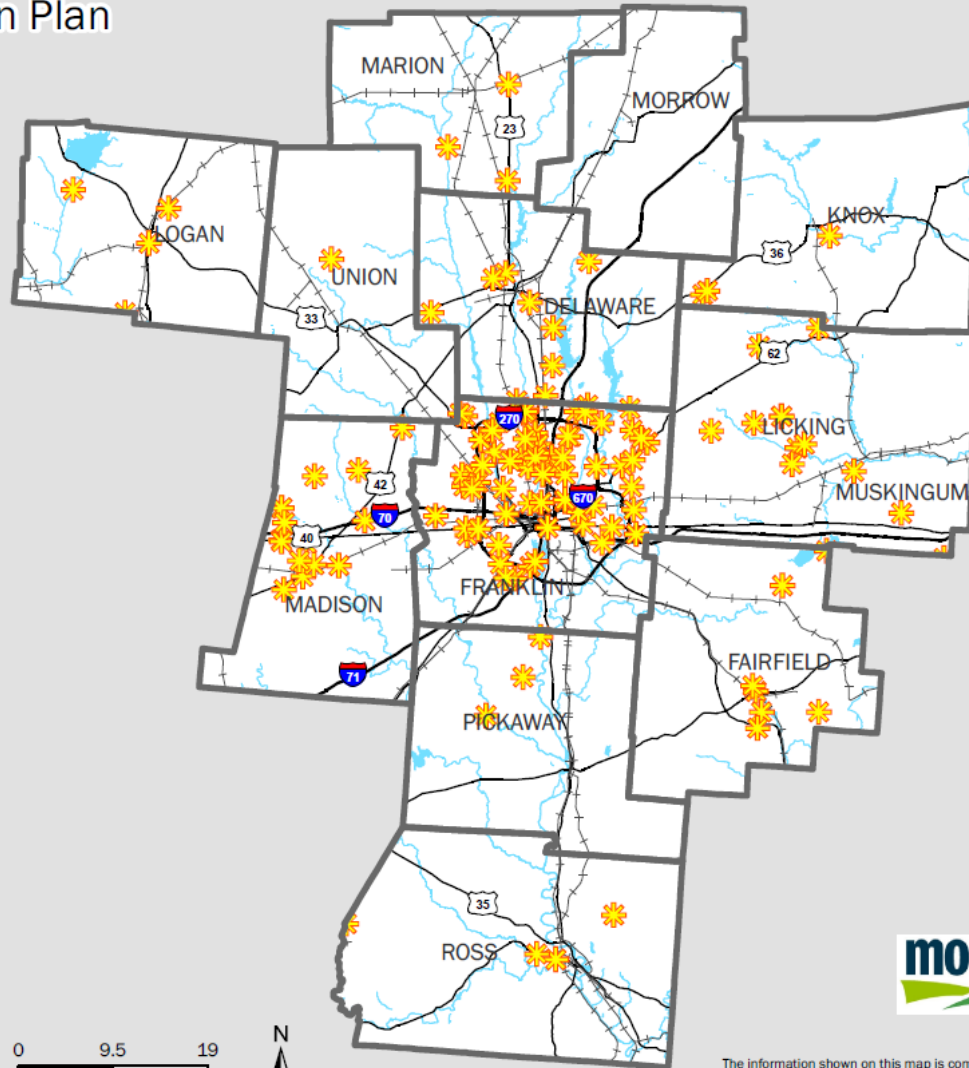
Legend

-  Solar Photovoltaic
-  Water
-  County Boundary
-  Railroad
-  Interstate
-  US Route

Source:
PUCO, ODOT, MORPC



0 9.5 19
Miles



The information shown on this map is compiled from various sources available to us which we believe to be reliable.
N:\ArcGIS\LOCAL\Regional Energy Action Plan (REAP)\Solar.mxd February 2014

- 1. Conduct Regional Energy Planning Initiative**
 - Shared vision among diverse & balanced views
 - Focus on emerging sectors: energy storage, data warehousing, buildings, agriculture
- 2. Engage Region's Job Development Effort**
 - Coordinate public/private efforts to prepare for emerging energy sector jobs
- 3. Start a Regional Energy Assurance Effort**
 - Local governments on front lines of emergency preparedness & response efforts
 - Include energy efficiency & distributed generation
- 4. Embrace & Exploit Shale Gas Development**
 - Important transitional energy source
 - Mitigate adverse environmental impacts
 - Explore partnerships with regional groups in Eastern Ohio

5. Build Transportation-Focused Collaborations

- Transportation Hub – rail, air, truck, warehousing & final parts assembly

6. Embrace the Economics of Green

- Implement innovative financing models & project tools
 - Lending & Property Assessed Clean Energy (PACE)
 - Reduce “soft costs” – regulation & insurance
- Utilize energy as a business development tool
- Use aggregation as a tool to stabilize costs and support clean energy

7. Build Availability of Regional Energy Data

- Establish a data consortium
- Expand energy benchmarking programs

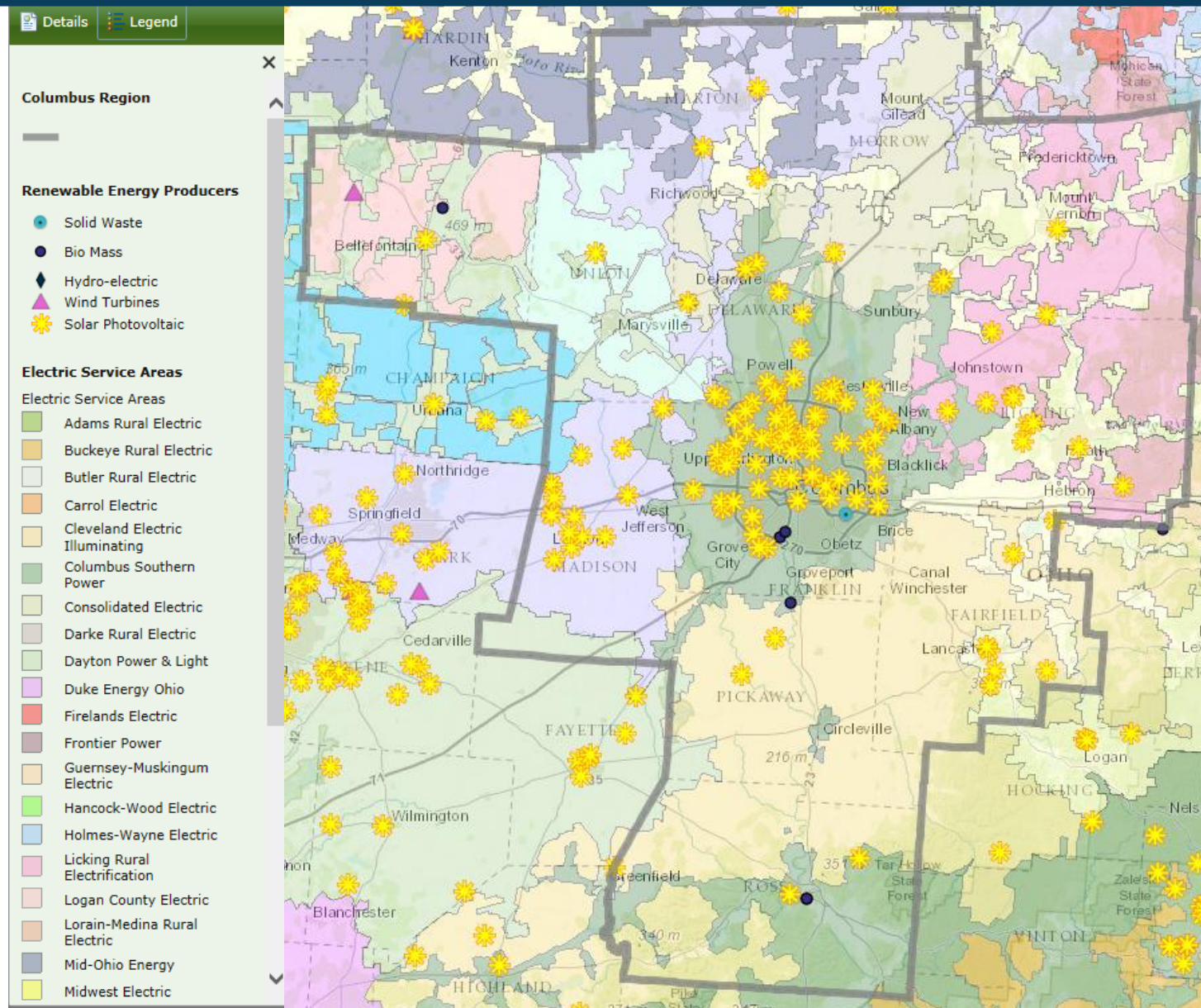
8. Advance & Insert Regional Policy Priorities

- Certainty in marketplace is key for business investments
- Anticipate impacts of Section 111(d) of Clean Air Act

Aggregation offers tremendous opportunity-

- Support local clean energy at a competitive cost to consumers
- Diversify energy sources and increase reliability
- Include energy efficiency program to further reduce energy and costs
- Significant buying power through strength in numbers

Interactive Map





Mid-Ohio Regional
Planning Commission

Brandi Whetstone

bwhetstone@morpc.org

111 Liberty Street, Suite 100
Columbus, Ohio 43215

Phone: 614.233.4174

www.morpc.org

